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Neighbourhood satisfaction and networks among older adults in Singapore

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ROSA Research
Brief Series
AUG 2023

**NEIGHBOURHOOD SATISFACTION
AND NETWORKS AMONG OLDER
ADULTS IN SINGAPORE**

SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

Key findings

1. Respondents are generally satisfied with their neighbourhoods, with close to 9 in 10 respondents being satisfied (slightly satisfied, somewhat satisfied, or very satisfied) with their neighbourhoods. Among the respondents who were satisfied, about 75% of them indicated a stronger positive response of “somewhat satisfied” or “very satisfied”.
2. Age and housing type were found to be significant factors shaping neighbourhood satisfaction, where respondents who are older, and living in wealthier housing types are more likely to report greater neighbourhood satisfaction.
3. A majority of respondents (78%) live near at least 6 or more of the following 8 amenities: public transportation, eateries, provisional shops, medical clinics, parks or greenspaces or exercise spaces, banks or ATMs, pre-schools or childcare centres, and community centres. The total number of amenities within a 10-minute walk from respondents’ home was also associated with greater neighbourhood satisfaction,
 - a. Out of these 8 amenities, parks, greenspaces, or exercise spaces is the greatest differentiator in neighbourhood satisfaction, where respondents who live near such spaces and respondents who do not have the greatest statistically significant difference in the proportion of respondents satisfied with their neighbourhood.
4. Respondents were more likely to be unfamiliar with their nearby neighbours, where only about 10% of respondents indicated that they knew most or all of the ten to fifteen families living closest to them, and about 23% of respondents indicated that they knew none of them. Respondents who are older are more likely to know their nearby neighbours than respondents who are younger.
5. A key finding in neighbourhood interactions among respondents is the difference in neighbourhood relationships of older adults living in public housing versus private housing. While those living in private housing are most likely to know at least some of their nearby neighbours by name, they are least likely to interact with their nearby neighbours. On the contrary, those who live in public housing are less likely to know at least some of their nearby neighbours but are more likely to interact with their nearby neighbours.
 - a. This suggests that those living in different housing types may have access to different social circles. Perhaps those living in public housing are likely to have more opportunities to interact with their neighbours in neighbourhood activities organized by their town councils, while those living in private housing are likely to have access to social circles beyond their neighbourhoods, such as work circles or recreational clubs. Additionally, it is likely that there is a greater proportion of isolated vulnerable older adults living in 1-3 room HDB flats than private housing.
6. In conclusion, we find that physical factors such as the accessibility of amenities and type of housing (public or private) shapes neighbourhood satisfaction, through influencing how social ties are formed within the neighbourhood. Neighbourhood satisfaction is positively correlated with overall life satisfaction.

Policy recommendations

1. We recommend the following:
 - a. A differentiated strategy can be employed to increase neighbourhood interactions among the different demographic groups among older adults, namely, the isolated vulnerable older adults living in 1-3 room HDBs, as well as those living in private housing. Current initiatives to reach out to isolated elderly can be further strengthened, while the scope of current neighbourhood activities can be expanded to include older adults living in private housing.
 - b. Further research and collaboration can be conducted to better understand the different needs of seniors in different neighbourhoods, as well as the effectiveness of current initiatives that have been implemented to facilitate building an age-friendly Singapore.

INTRODUCTION

The built and social environment surrounding one's place of residence is an important factor that shapes well-being and quality of life. This is especially so for older adults as their sphere of mobility decreases and their functional capacity may decline as they age, making their immediate environment more vital in shaping their lives.

Studies have established the importance and impact of the physical environment on health and well-being of older adults across various communities (Addae-Dapaah 2008; Alidoust and Bosman 2015; Gale et al. 2011; Oswald et al. 2007). A study on older adults in Singapore found that living environment and provision of services and facilities are some of the factors that contribute to the overall well-being of older adults, in addition to personal well-being, interpersonal relationships and housing quality (Addae-Dapaah 2008). Another study in Singapore found that having accessible amenities was important for neighbourhood satisfaction, with parks, water bodies, community gardens, and elderly care facilities positively correlated with neighbourhood satisfaction (Tao et al. 2021).

Other studies suggest that living in more accessible homes promotes a greater sense of well-being and independence in daily life for older adults in Europe (Oswald et al. 2007); that greater neighbourhood cohesion and fewer neighbourhood problems correlated with higher levels of mental well-being (Gale et al. 2011); and that neighbourhood safety, walkability and accessibility as well as the presence of neighbourhood spaces promotes better overall health and well-being, through encouraging social interaction among older adults in Australia (Alidoust and Bosman 2015).

Thus, it is apparent that physical factors and social factors interact and shape older adults' neighbourhood satisfaction. Physical factors in neighbourhoods that enable older adults to remain independent, engage in meaningful activities and facilitate social interactions contribute to their neighbourhood satisfaction, health, and well-being. Given the importance of these factors in shaping older adult well-being, the current report explored how factors such as the availability of neighbourhood amenities and interactions with neighbours within communities might shape the levels of neighbourhood satisfaction and well-being of older adults in Singapore.

The Urban Neighbourhood Environment in Singapore

The Singapore government has recognized the importance of a well-planned and well-designed built environment and the role that it plays in improving the health and well-being of older adults.

In 2011, a pilot study was conducted on senior residents aged 60 and above in Marine Parade to study how to better enable ageing in place for seniors (Yeo 2013). This then led to the City for All Ages (CFAA) initiative, which aimed to build senior-friendly communities, through infrastructure improvements as well as better social programming to support seniors (Ministry of Health 2014). This project was a whole-of-Government effort that involved the Ministry of Community Development, Youth and Sports, Ministry of National Development, Housing & Development Board, Urban Redevelopment Authority, Centre for Liveable Cities, Economic Development Board and SPRING Singapore (Singapore Business Review 2011). Through a ground-up approach, they reached out to the residents to understand their needs, before customizing suitable solutions (Yeo 2013). Following the CFAA initiative, the government announce the 2015 Action Plan for Successful Ageing, which includes initiatives to support older adults across various areas such as health, housing, and transport (Loo 2017).

Most notably, in 2021, the government announced Singapore's first health district – Queenstown – which will incorporate purposeful design of the built environment to inspire active lifestyles, especially

that among seniors (Ng 2021). This is the result of a collaboration between the Housing and Development Board (HDB), the National University Health System (NUHS) and the National University of Singapore (NUS) for the pilot programme. An example of an initiative for the Health District @ Queenstown is the BTO development, Queen's Arc, which was launched in August 2021 and has been planned to be well-connected to the Rail Corridor and the future Alexandra hospital campus, and will feature a jogging loop at the car park rooftop garden as well as wellness and heritage trails (HDB, NUHS, and NUS 2021).

More recently, the 2023 Action Plan for Successful Ageing, developed by The Ministerial Committee on Ageing and released by the Ministry of Health, reinstated the importance of an age-friendly built environment to support seniors and ageing in place (Ministry of Health 2023). The action plan highlights initiatives to encourage ageing in place, such as the establishment of dementia-friendly communities, co-location of senior care centres and childcare centres to foster interactions, and wheelchair accessible public buses and MRT (Ministry of Health 2023).

Today, various initiatives and schemes are in place as a result of the government's decade of effort in building an age-friendly Singapore to support ageing in place. As of 2023, the LTA has implemented about 50 Silver Zones¹ island-wide (Land Transport Authority 2020), over 1,000 pedestrian crossings equipped with a Green Man+² function (Land Transport Authority 2022), and retrofitted lifts at over 77 pedestrian overhead bridges (Land Transport Authority 2023). The Ministry of Health also reorganized the public healthcare system to ensure a full range of services such as acute hospital care, primary care, and community care is accessible in each geographical cluster, to provide integrated care for patients and support the growing healthcare needs of an ageing population (Ministry of Health 2017). Additionally, the Ministry of Health and Agency for Integrated Care have been growing a nationwide network of Active Ageing Centre (AACs) to support seniors in the community, with 119 AACs currently (Ministry of Health 2023). Together, these initiatives and schemes aim to create a senior-friendly urban environment through ensuring the safety and accessibility to care and community support in Singapore.

While these initiatives have been developed and implemented, more research is needed to understand how these initiatives have affected and will affect the well-being of older adults. Thus, the current report examines this area of study in greater detail.

¹ Silver Zones are stretches of roads with enhanced safety features such as prominent road markings, wider centre road dividers and road designs that slow motorist down (Ministry of Health 2023).

² Green Man+ allocates a longer green man time (up to 13 seconds) for the elderly and Persons with Disabilities (PWD) at pedestrian crossings fitted with Green Man+ (Land Transport Authority 2022).

STUDY

To examine older adults' satisfaction with their neighbourhoods and the various physical and social factors that shape neighbourhood satisfaction as well as overall life satisfaction, several questions about close contacts and perceptions of neighbourhoods were fielded to our respondents. These questions are outlined below.

Neighbourhood satisfaction

Respondents were asked how satisfied they were with their neighbourhood, defined as the area that is within a 10-minute walk of their home. They were asked to rate their satisfaction on a scale of 1 "Very satisfied" to 6 "Very dissatisfied". This variable was reverse coded to obtain the neighbourhood satisfaction score, where a lower score represents lower neighbourhood satisfaction while a higher score represents greater neighbourhood satisfaction.

Neighbourhood amenities

Respondents were asked to indicate the amenities that are available within a 10-minute walk of their home, from a list of 8 amenities: (1) medical clinic including general practitioner (GP), polyclinic or hospital, (2) community centre, (3) eateries including hawker centre, restaurant or coffee shop, (4) provisional shops including supermarket, wet market, convenience store or sundry shop (Mama shop), (5) banks or auto-teller machines (ATM), (6) bus stop or MRT or LRT station, (7) parks, greenspaces or exercise spaces, (8) pre-school or childcare centre, or none of the above. This variable was summed up to obtain a score for the total number of amenities within a 10-minute walk of respondents' home.

Knowing close neighbours by name

Respondents were asked how many of the adults among their nearby neighbours, defined as the ten to fifteen families living closest to them, they would know by name if they met on the street. They were asked to answer on a scale of 1 "None of them" to 4 "All of them". This variable was recoded to "None of them", "Some of them", and "Most or All of them".

Interactions with close neighbours

Respondents were asked how often they get together with their nearby neighbours for a chat or social visit, from 1 "Daily" to 6 "Once a year or less often". This variable was recoded to "Less than once a month" and "More than once a month".

Respondents were also asked how often they give or receive favours from their neighbours in their nearby neighbourhood, from 1 "Often" to 4 "Never". This variable was recoded to "Rarely/Never" and "Sometimes/Often".

Neighbourhood cohesion

Respondents were asked to indicate their agreement or disagreement with 5 statements about their neighbourhood: “This is a close-knit area”, “People around here are willing to help their neighbours”, “People in this area generally don’t get along with each other”, “People in this area don’t share the same values”, and “People in this area can be trusted”. Respondents rated these statements from 1 “Strongly disagree” to 6 “Strongly agree”. Statements 3 and 4 were reverse coded, and all 5 statements were summed up to obtain a neighbourhood cohesion score, where higher scores represent greater perception of neighbourhood cohesion.

Overall life satisfaction

Respondents are asked how satisfied they are with their life as a whole these days, ranging from 1 “Very satisfied” to 5 “Very dissatisfied”. This variable was reverse coded to obtain the overall life satisfaction score where a higher score represents higher overall life satisfaction.

Duration of stay in current residence

While we do not have the exact data for the number of years that respondents have resided in their current residence, we do have records of whether respondents have changed their address of residence since joining the panel in 2015. We use this data to categorize respondents into those who have lived in their current residence for at least the past 7 years, as well as those who have moved houses at least once in the past 7 years.

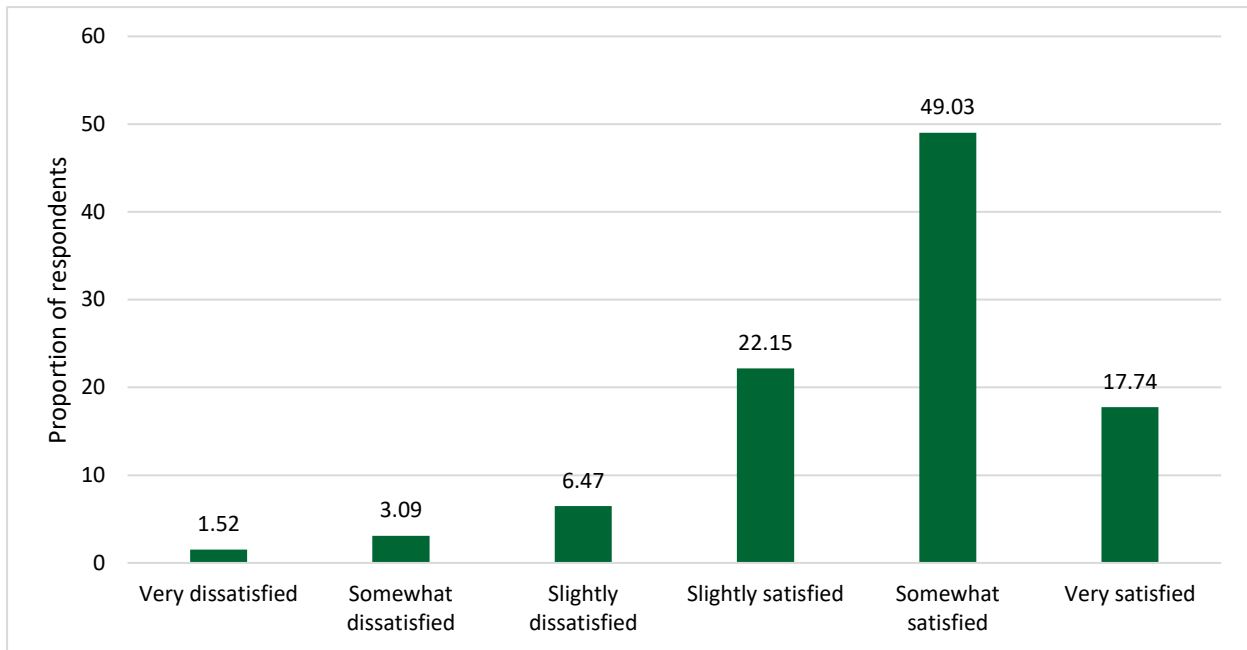
Data

This study uses data from the Singapore Life Panel (SLP), a population representative monthly panel survey that has been conducted since 2015 (see Vaithianathan et al. (2018) for details regarding sample recruitment). Respondents are part of a large sample of Singaporeans aged 57 to 76 and their spouses. The SLP has an average response rate of about 7,000 to 7,500 respondents per month in the 12 months preceding August 2022. This study uses the survey data collected in August 2022, where a total of 6,893 respondents fell within the eligible age-range.

FINDINGS

Neighbourhood satisfaction

Figure 1. Neighbourhood satisfaction of respondents in August 2022 (N=6,827).



The figure above presents the overall neighbourhood satisfaction of respondents surveyed in August 2022. Respondents were asked how satisfied they were with their neighbourhood, defined as the area within a 10-minute walk of their home, and in consideration of elements such as cleanliness, noise pollution, the condition of buildings and access to amenities. Close to 9 in 10 respondents were either slightly, somewhat, or very satisfied with their neighbourhood, with about 75% of those satisfied respondents indicating a stronger positive response of “somewhat satisfied” or “very satisfied”.

Overall, these results suggest that older adults in Singapore are mostly satisfied with their neighbourhood.

A demographic breakdown of respondents by age, highest education, and housing type in Figures 2 to 4 below reveals that respondents aged 72 to 76, with university education, and living in private housing have greater neighbourhood satisfaction compared to their counterparts who are younger, with lower education levels, and living in smaller homes. The neighbourhood satisfaction difference between male and female respondents was negligible. A table of the demographic breakdown is presented in Table 1 in the Appendix.

Using independent sample T-tests and one-way ANOVA tests, the breakdown of neighbourhood satisfaction by demographic groups showed that at 95% confidence, housing type and age are differentiators of neighbourhood satisfaction.

Figure 2. Demographic breakdown of proportion of respondents who are somewhat or very satisfied with their neighbourhood by age³.

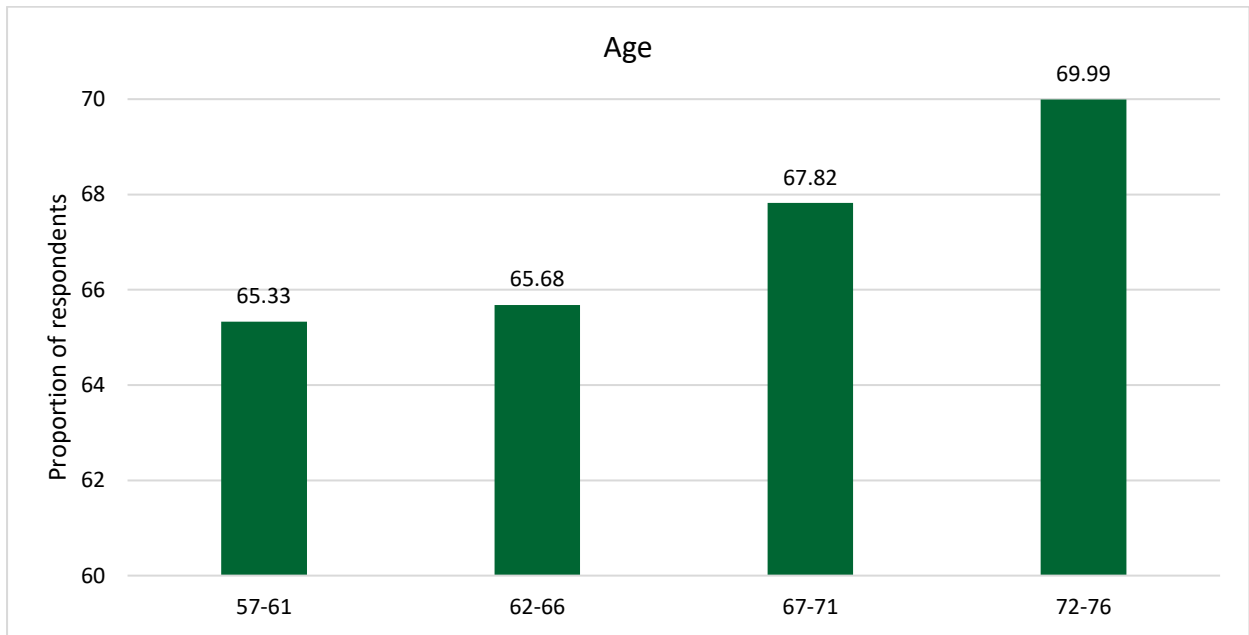
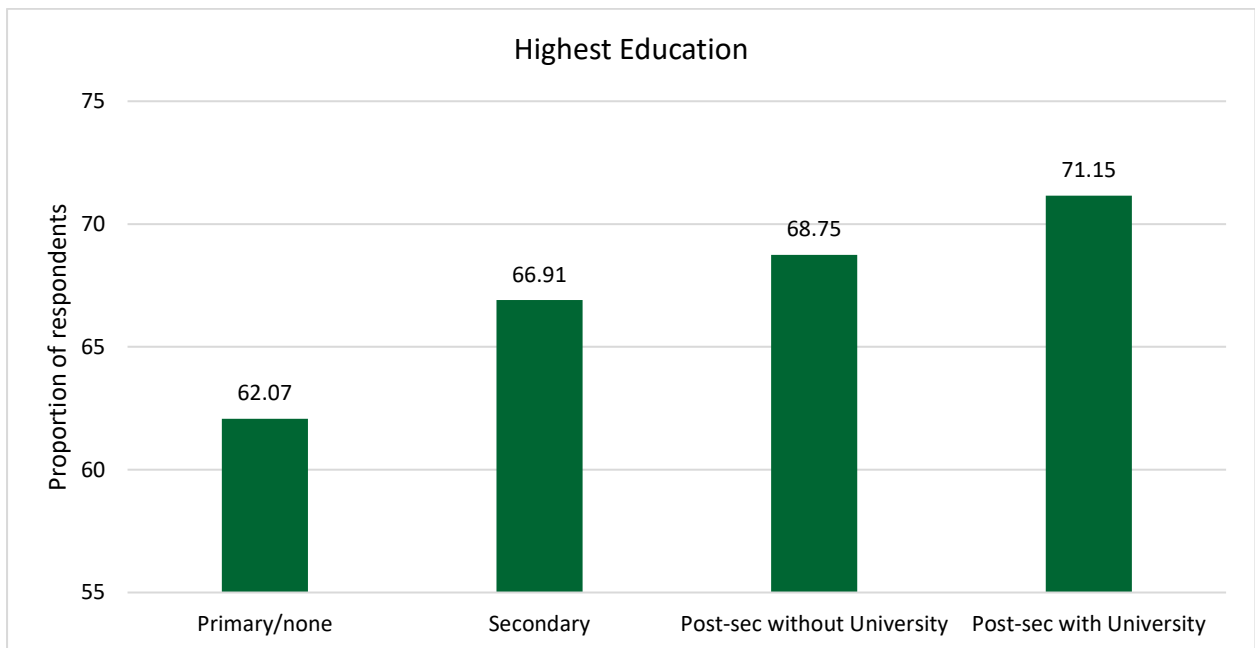
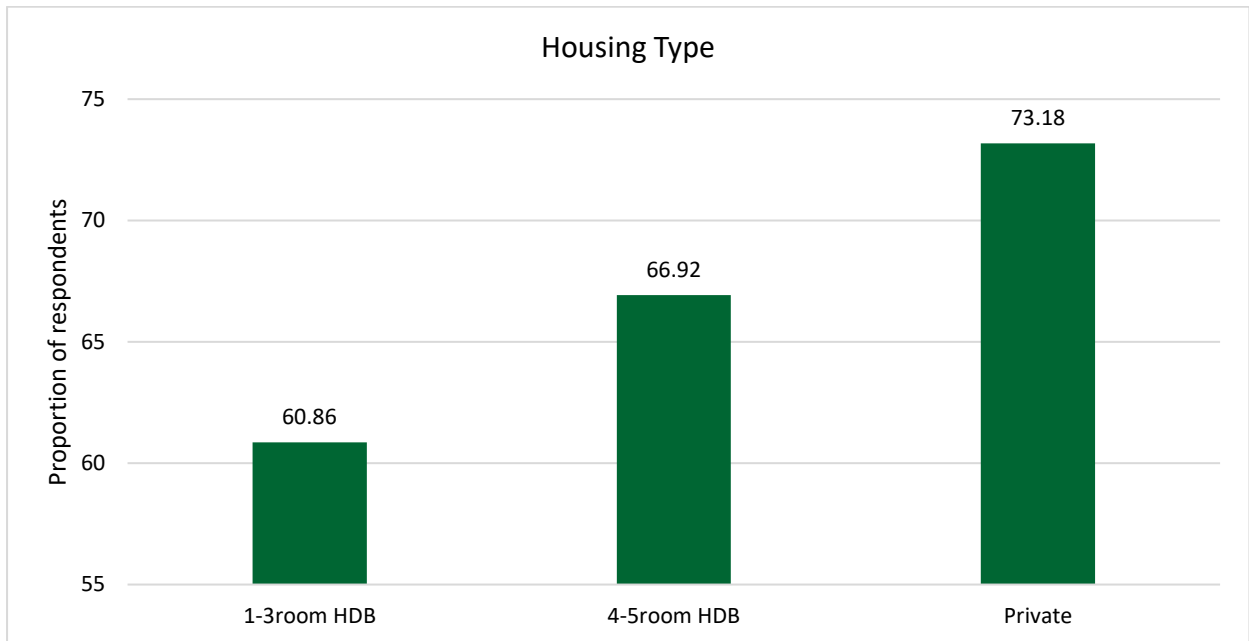


Figure 3. Demographic breakdown of proportion of respondents who are somewhat or very satisfied with their neighbourhood by highest education.



³ Respondents were grouped into 5-year age bands beginning with our youngest respondents aged 57 and ending with our oldest respondents aged 76.

Figure 4. Demographic breakdown of proportion of respondents who are somewhat or very satisfied with their neighbourhood by housing type.



The availability of neighbourhood amenities and its impact on neighbourhood satisfaction

A key aspect influencing neighbourhood satisfaction among older adults in Singapore is the availability and accessibility of amenities in the neighbourhood vicinity (Addae-Dapaah 2008; Tao et al. 2021). For the respondents surveyed in August, the average number of amenities that are available within a 10-minute walk was 6.5 out of a total of the 8 aforementioned amenities.

Over 3 in 4 respondents (78.14%) reported having at least 6 or more of such amenities available within a 10-minute walk from their home (Figure 5). This implies that majority of the neighbourhoods that respondents live in are well-equipped with a range of amenities available. This can also be seen from Figure 6 where over 9 in 10 respondents live within a 10-minute walk to public transportation, eateries, and provisional shops, and over 7 in 10 respondents live near all 8 amenities.

Figure 5. Proportion of respondents by total number of amenities within a 10-minute walk from home.

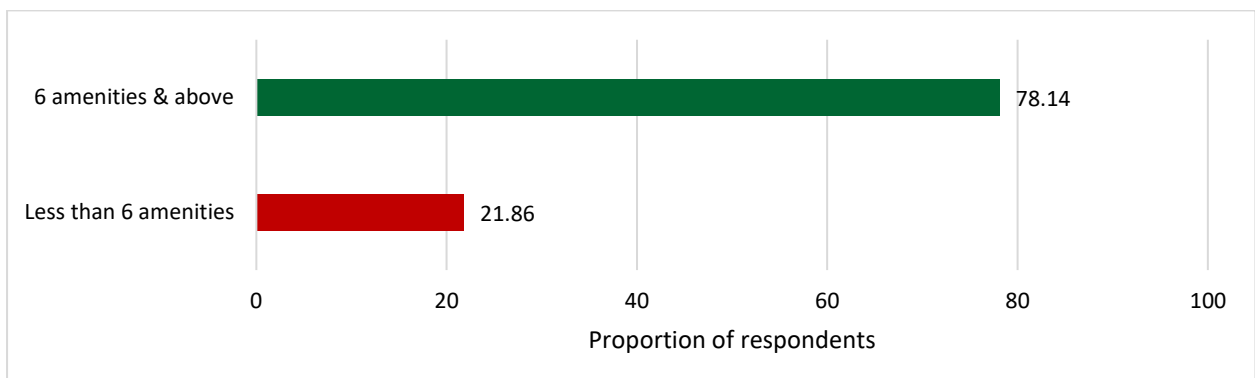
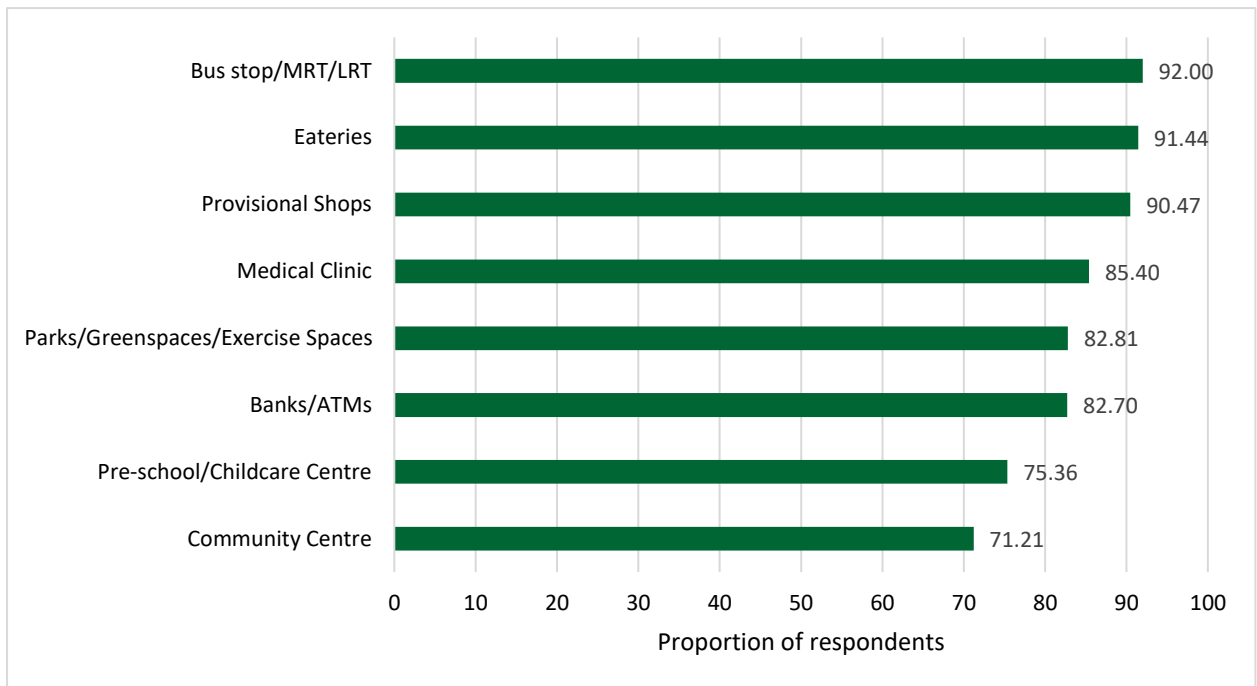
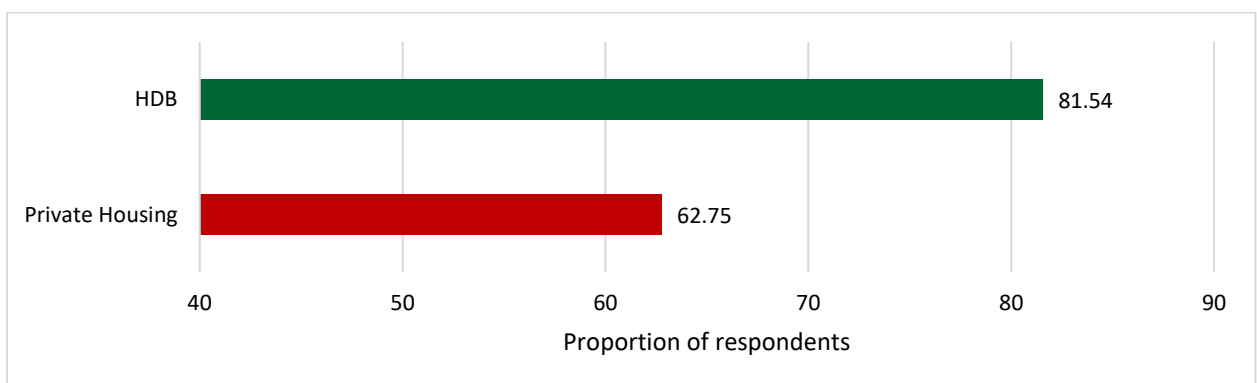


Figure 6. Proportion of respondents living near each of the 8 amenities.



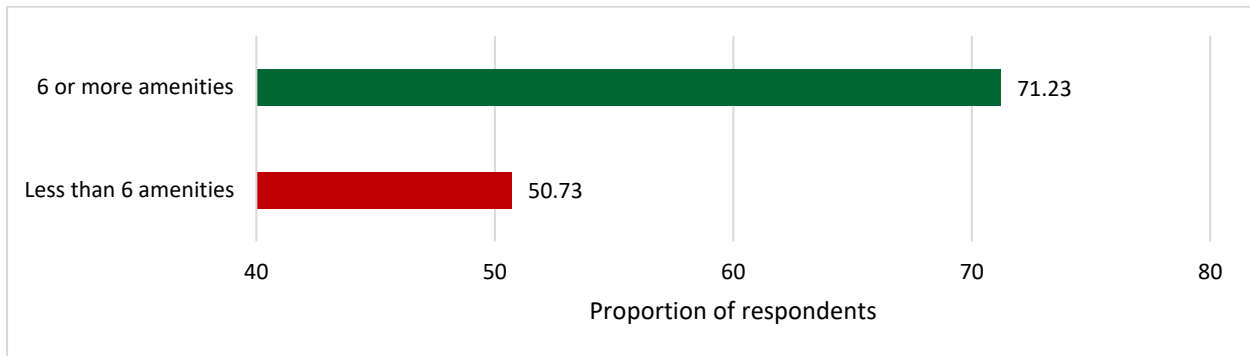
It is unsurprising that a majority of respondents report accessibility to many amenities, given that the housing development board (HDB) towns are designed to each have a range of amenities and recreational space for their residents. However, when comparing respondents who reside in public housing to those who reside in private housing, over 4 in 5 respondents living in HDB flats were found to have at least 6 of the 8 amenities within a 10-minute walk from their home, while only about 3 in 5 respondents living in private housing reported likewise (see Figure 7 below).

Figure 7. Proportion of respondents with 6 amenities & above within a 10-minute walk from home by housing type.



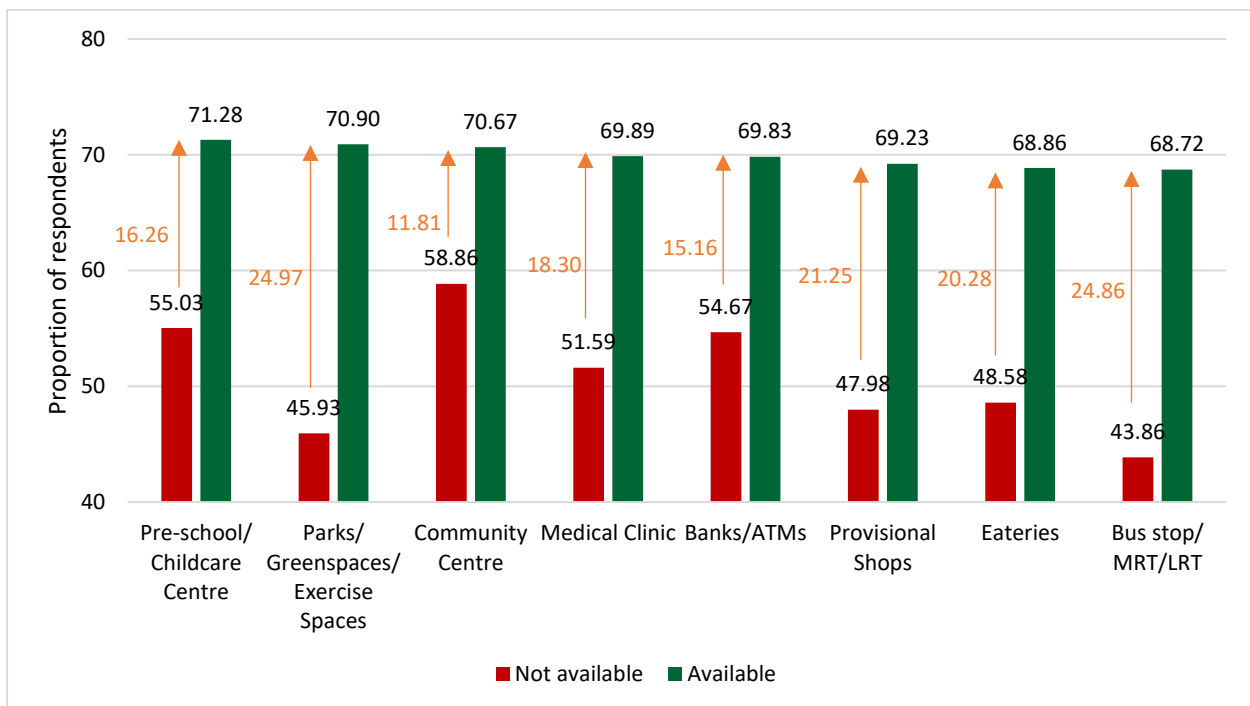
Compared with those who live near fewer amenities, respondents residing in neighbourhoods with 6 or more amenities are more likely to be at least somewhat satisfied with their neighbourhood (70% vs 50%). Using independent sample t-tests, the difference in neighbourhood satisfaction between these two groups is significant at the 0.01 level.

Figure 8. Proportion of respondents who are somewhat or very satisfied with their neighbourhood by total number of amenities.



Additionally, the amenity that appears to have the greatest difference in neighbourhood satisfaction is the presence or absence of parks, greenspaces or exercise spaces, with over 70% of respondents who live near the aforementioned amenity somewhat or very satisfied with their neighbourhood, compared with less than half of respondents who do not live near such spaces (see Figure 9).

Figure 9. Proportion of respondents who are somewhat or very satisfied with their neighbourhood by presence or absence of each amenity.⁴



This is in line with our previous research (Tan et al. 2023) where we found that the presence of parks, greenspaces and exercise spaces was associated with higher levels of social well-being among older adults, and is also the amenity that appears to have the strongest effect on the social well-being of older adults. Other studies have also found nature spaces to be positively correlated with

⁴ Using independent sample t-tests, difference in mean neighbourhood satisfaction between respondents with or without each amenity was significant at the 0.01 level.

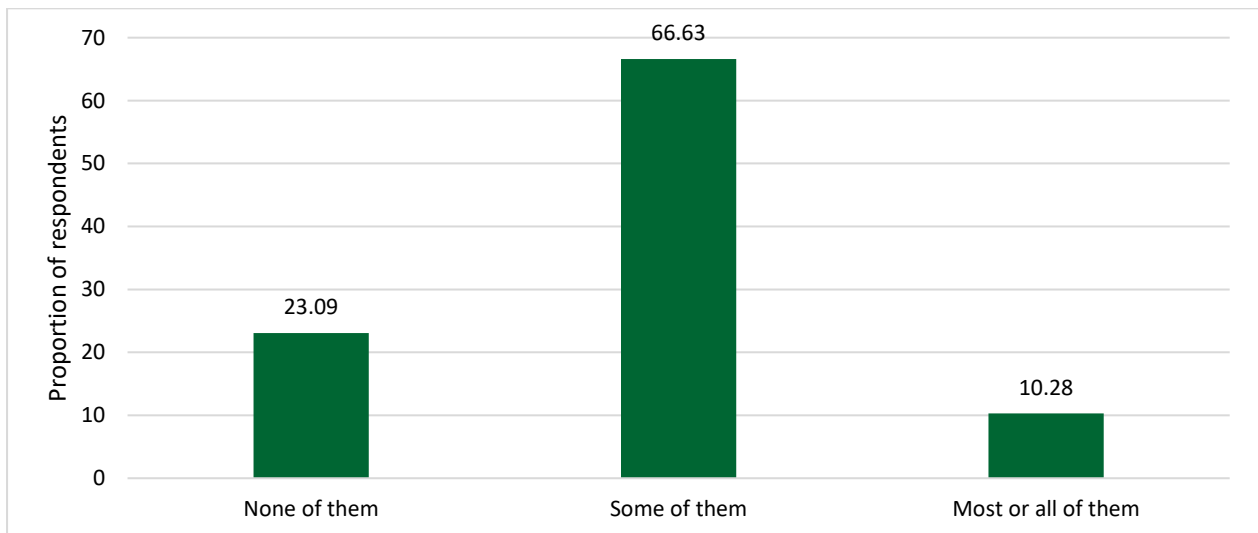
neighbourhood satisfaction. The presence of nature spaces may provide an avenue for social interactions and well-being, and subsequently greater neighbourhood satisfaction. However, it may also be that people who have a satisfying social network are simply more likely to spend time outdoors.

Neighbourhood interactions

To investigate the relationship between neighbourhood interactions and neighbourhood satisfaction, we looked at respondents' familiarity with their nearby neighbours and frequency of interactions and exchanges.

Respondents were asked to indicate how many of the adults they know by name among their nearby neighbours, defined as the ten to fifteen families living closest to them. The most common response was "some of them", which 2 in 3 respondents chose (see Figure 10 below). Only about 1 in 10 respondents indicated they knew most or all of their nearby neighbours by name, while close to 1 in 4 respondents indicated they knew none of their nearby neighbours by name.

Figure 10. Proportion of respondents who know their nearby neighbours by name.



Next, respondents were asked to indicate how often they get together with their nearby neighbours just for a chat or for a social visit, and how often they give or receive favours from their neighbours. Over half of respondents indicated they get together with their nearby neighbours less than once a month (53%) and never or rarely give or receive favours from their neighbours (56%) (see Figures 11 and 12 below).

Overall, majority of older adults in Singapore generally appear to be more unfamiliar than familiar with their nearby neighbours, and do not socialize with one another often.

Figure 11. Proportion of respondents who get together with their nearby neighbours for a chat or social visit.

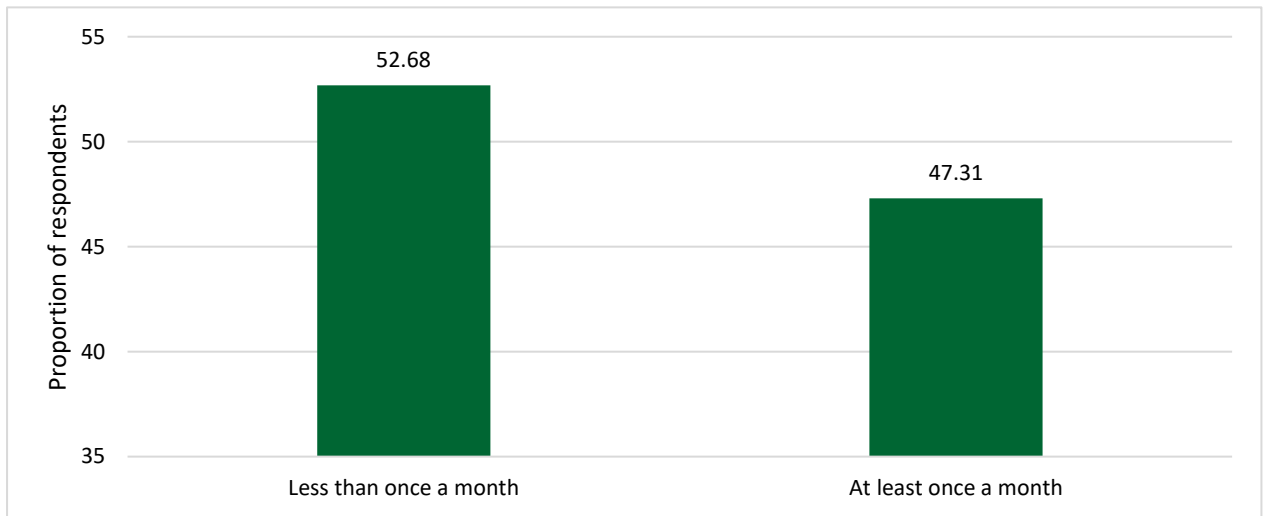
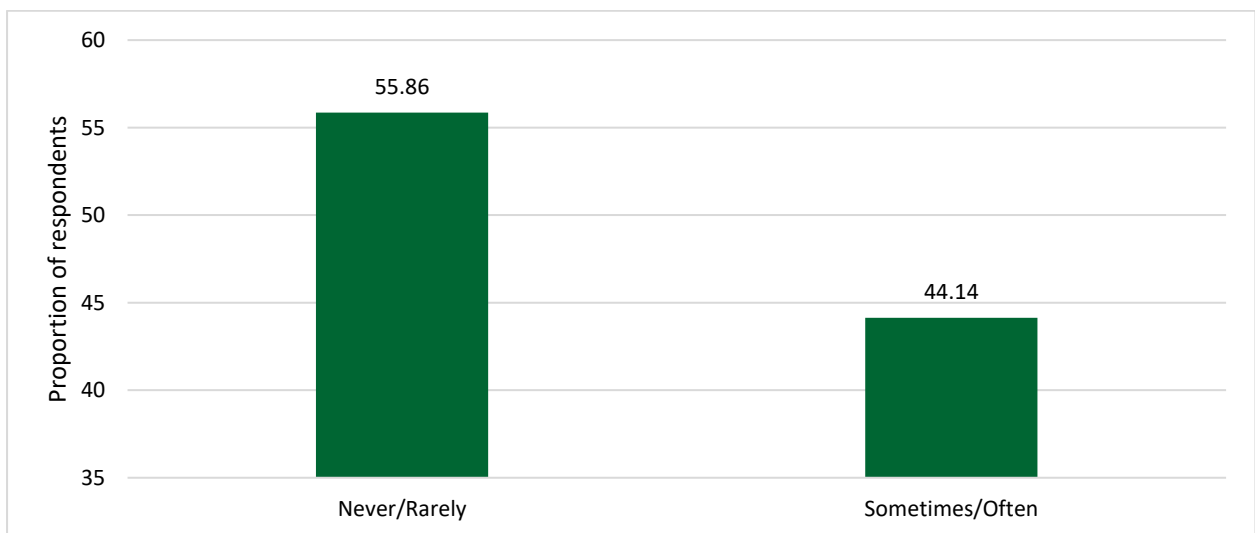


Figure 12. Proportion of respondents who give and receive favours from neighbours



Respondents who indicated greater familiarity with their nearby neighbours and who indicated greater frequency of neighbour interactions had higher corresponding neighbourhood satisfaction scores. Using independent sample T-tests and one-way ANOVA tests, the differences in the mean neighbourhood satisfaction between groups was significant at the 0.01 level.

Next, we further investigated differences in the neighbourhood ties and interactions between older adults of different age groups, housing types, education levels, and duration of stay in current residence. This would allow us to identify segments among older adults that are more or less likely to have close ties with their neighbours and interact with one another, and the corresponding differences in neighbourhood satisfaction.

Age

Compared with all other age groups, older adults aged 72 to 76 are most likely to know most or all of their nearby neighbours by name (11.84%), get together with their nearby neighbours for a chat or social visit at least once a week (55.94%), as well as give and receive favours from their neighbours (48.26%). See Figures 13 to 15.

On the other hand, older adults aged 62 to 66 have the lowest proportion of respondents who know their nearby neighbours by name (9.43%), the second lowest proportion of respondents who get together with their nearby neighbours for a chat or social visit at least once a week (45.15%), as well as the lowest proportion of respondents who sometimes or often give and receive favours from their neighbours (41.95%). Those aged 57 to 61 are not too far off, at approximately 10%, 42%, and 43% respectively.

The overall trend appears to be that the older age groups of 67 to 71 and 72 to 76 are more familiar with their nearby neighbours and have more frequent interactions with them, compared to older adults in the younger age groups of 57 to 61 and 62 to 66. This is likely due to the fact that older adults in the younger age groups are more likely to be in the workforce still, and thus have less time to get to know and socialize with their neighbours, while older groups are more likely to be retired, and thus spend more time at home and have a greater likelihood of meeting their nearby neighbours.

A one-way ANOVA test confirmed that neighbourhood satisfaction was not equal across the four age groups ($p < .01$). Using the Tukey post hoc test, the only pair of age groups that had a significant difference in neighbourhood satisfaction at the 0.01 level is those aged 72 to 76 and 57 to 61. Those who are older experience greater mean neighbourhood satisfaction than those who are younger.

Figure 13. Proportion of respondents who know their nearby neighbours by name, by age group.

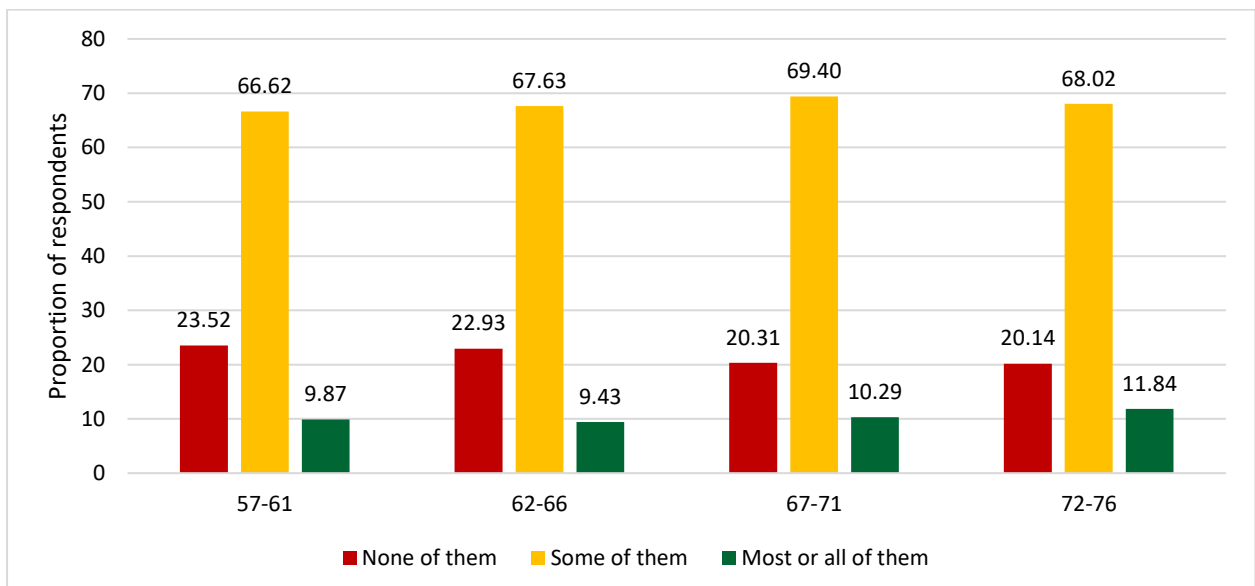


Figure 14. Proportion of respondents who get together with their nearby neighbours for a chat or social visit, by age group.

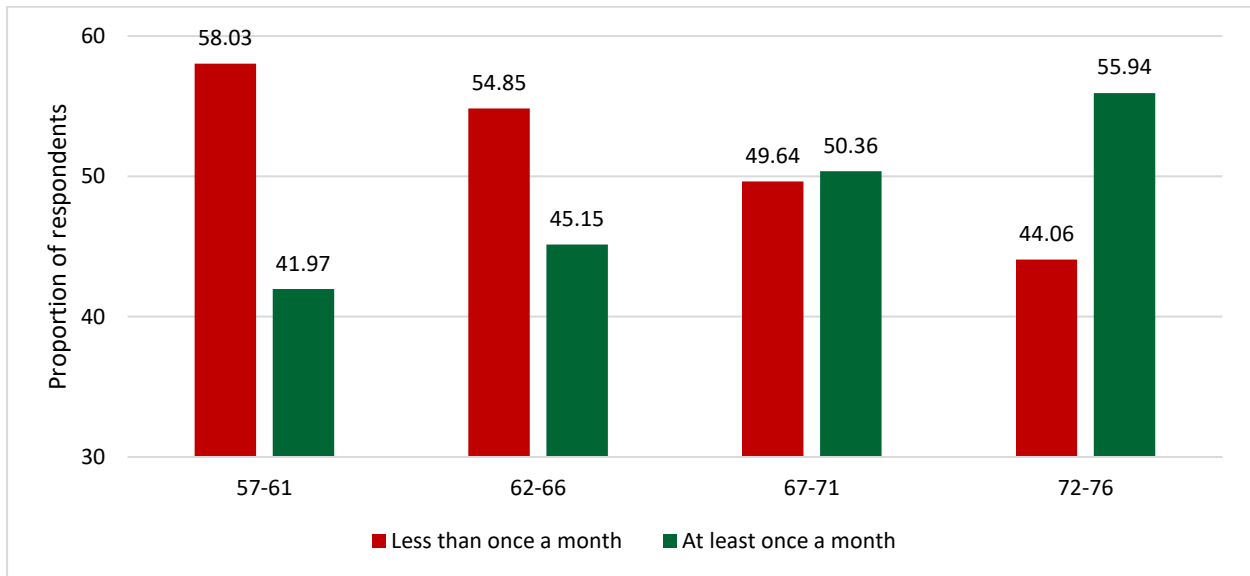
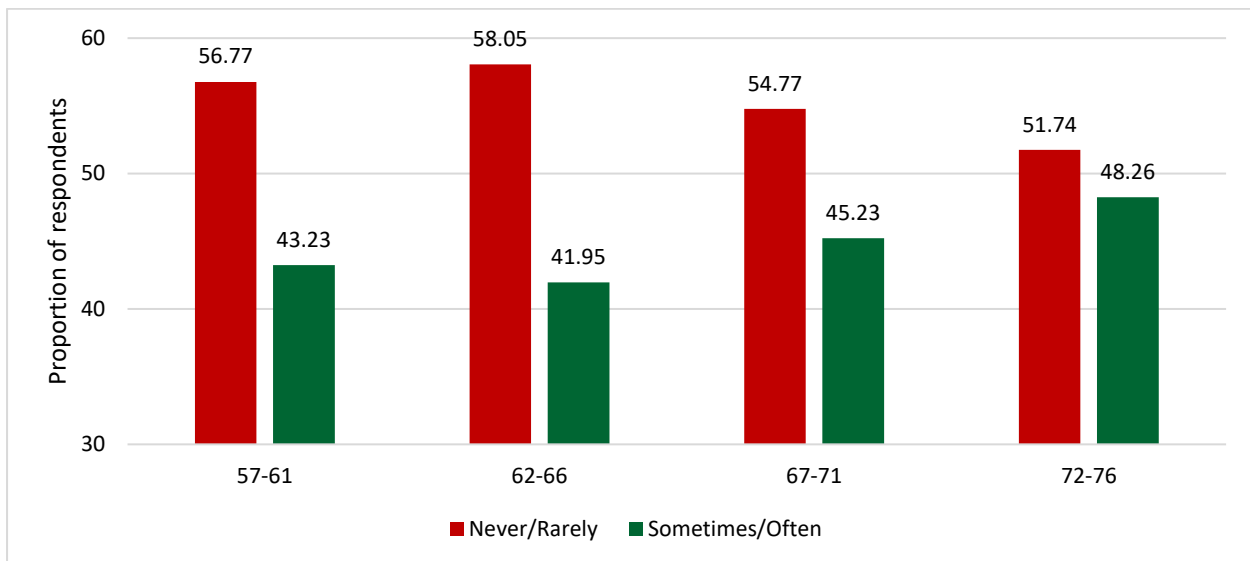


Figure 15. Proportion of respondents who give and receive favours from their neighbours, by age group.



Housing Type

Older adults living in private housing are most likely to know at least some of their nearby neighbours by name, with only about 15% indicating they know none of their neighbours (see Figure 16 below). Yet, this same group has the lowest proportion of respondents among housing types who interact frequently with their nearby neighbours, where only about 1 in 3 get together with their nearby neighbours at least once a month and 2 in 5 who sometimes or often give or receive favours from their neighbours (see Figures 17 and 18 below). This is in contrast to close to half and over half of respondents living in 4-5-room HDB and 1-3-room HDB respectively who get together with their nearby

neighbours at least once a month and about 44% and 45% respectively who sometimes or often give or receive favours from their neighbours.

This suggests that for respondents who live in 1-3 room HDB flats, they are less likely to know their neighbours. However, for those who know at least some of their neighbours, respondents who live in 1-3 room HDB flats are more likely to interact with their neighbours more frequently. This gives us a glimpse of how neighbourhood interactions and neighbourhood communities may differ across the different housing types. The greater proportion of those living in 1-3 room HDB who do not know any of their nearby neighbours suggests that although some of those living in 1-3 room HDB have more interactions with their neighbours, there may also be a greater proportion of isolated older adults who live in 1-3room HDB compared to 4-5 room HDB and private housing.

This also possibly points to the different social circles and neighbourhood activities that those living in different housing types have access to. While those living in HDBs are more likely to have access to neighbourhood activities organized by their respective town councils and thus have more opportunities for interactions with their neighbours, those living in private housing are more likely to have access to social circles beyond their neighbourhoods, such as their work circles and social clubs.

Using a one-way ANOVA test, the difference in the mean neighbourhood satisfaction between at least one pair of housing types was significant at the 0.01 level. Using the Tukey post hoc test, there is a significant difference in neighbourhood satisfaction between all housing types at the 0.01 level. Those who live in wealthier housing types have greater mean neighbourhood satisfaction than those who live in less expensive housing types.

Figure 16. Proportion of respondents who know their nearby neighbours by name, by housing type.

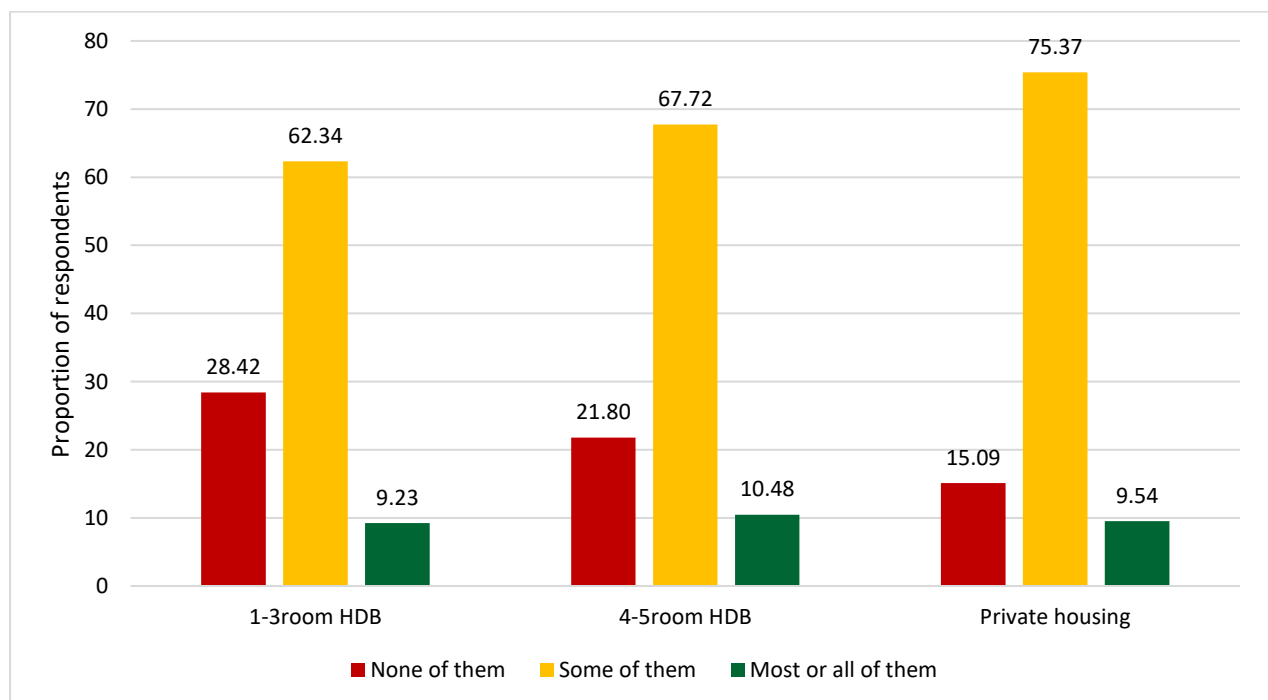


Figure 17. Proportion of respondents who get together with their nearby neighbours for a chat or social visit, by housing type.

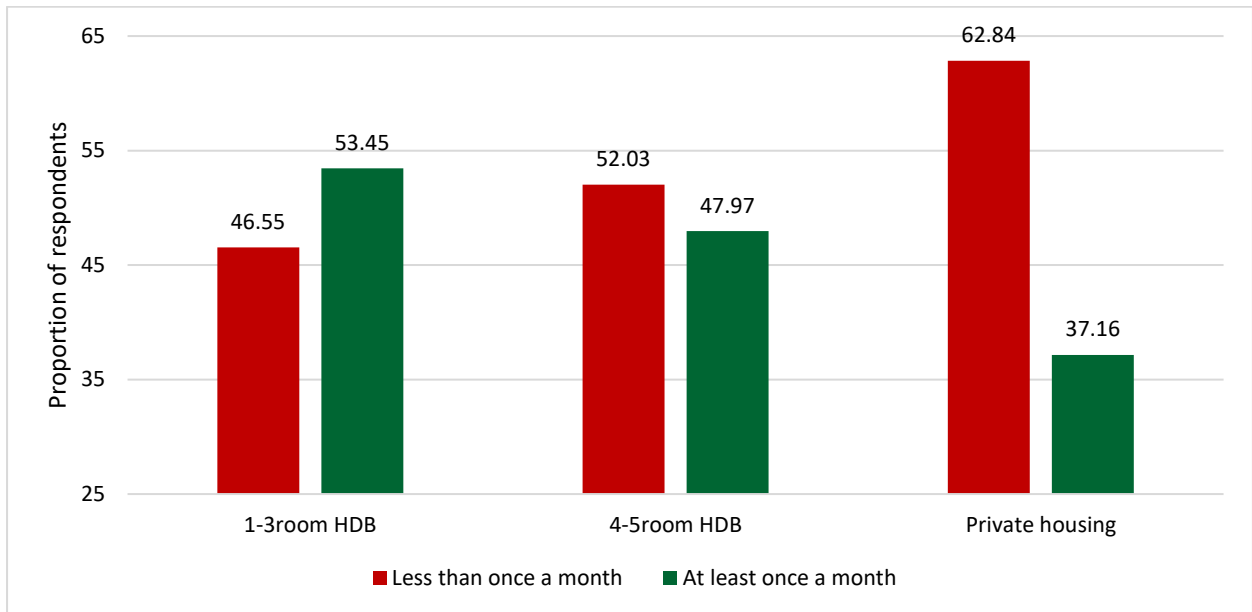
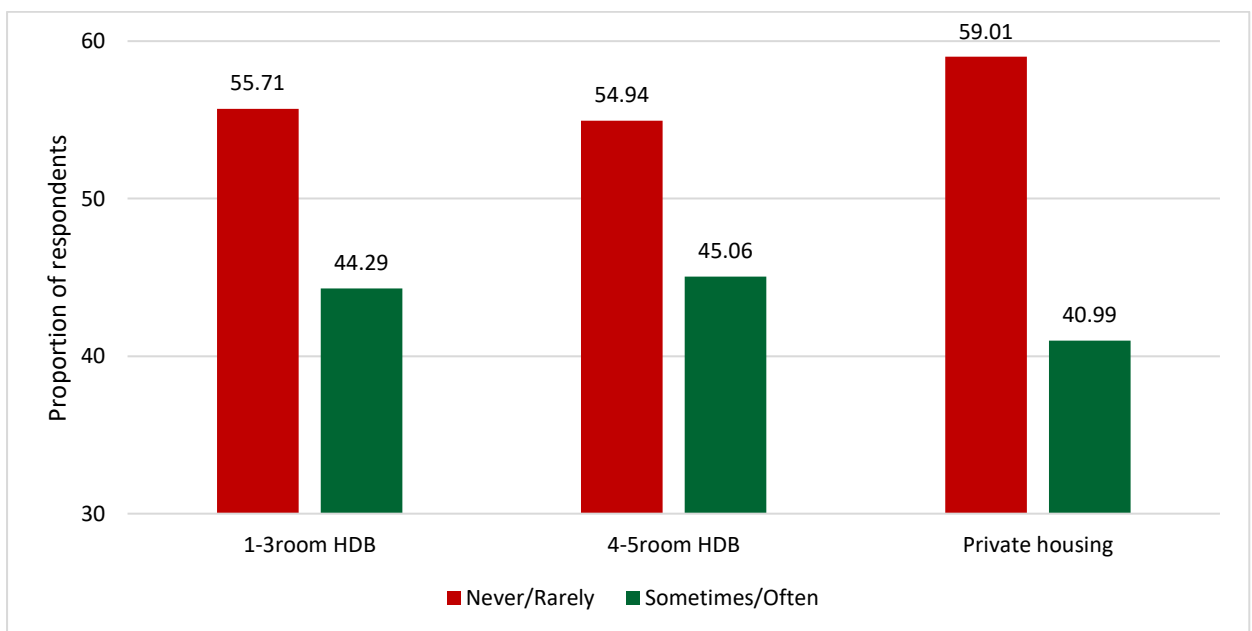


Figure 18. Proportion of respondents who give or receive favours from their neighbours, by housing type.



Education level

In terms of education level, older adults with primary or no education have the greatest proportion of respondents who know most or all of their nearby neighbours (13%), yet they also have the greatest proportion of respondents who know none of their nearby neighbours (26%) (see Figure 19 below).

As education level increases, the proportion of respondents who know at least some of their nearby neighbours increases as well. Approximately 74% of those with primary or no education know at least some of their nearby neighbours, while this number is 83% for those with university education. On the contrary, as education level increases, the proportion of respondents who interact with their neighbours generally decreases (see Figure 20 below). Approximately 56% and 48% of respondents with primary or no education get together with their nearby neighbours at least once a month and sometimes or often give or receive favours from their neighbours, respectively, while only about 36% and 43% of respondents with university education do so, respectively (see Figure 21 below).

Similar to preliminary trends observed in housing type, it is possible that there is a greater proportion of isolated older adults with primary or no education compared to those with higher education levels. Using housing type and education as proxy measures for socioeconomic status (SES), it is possible that there is a group of lower SES and isolated older adults who do not know or interact with their neighbours.

The difference in the mean neighbourhood satisfaction between education levels was significant at the 0.01 level. As education level increases, mean neighbourhood satisfaction increases.

Figure 19. Proportion of respondents who know their nearby neighbours by name, by education level.

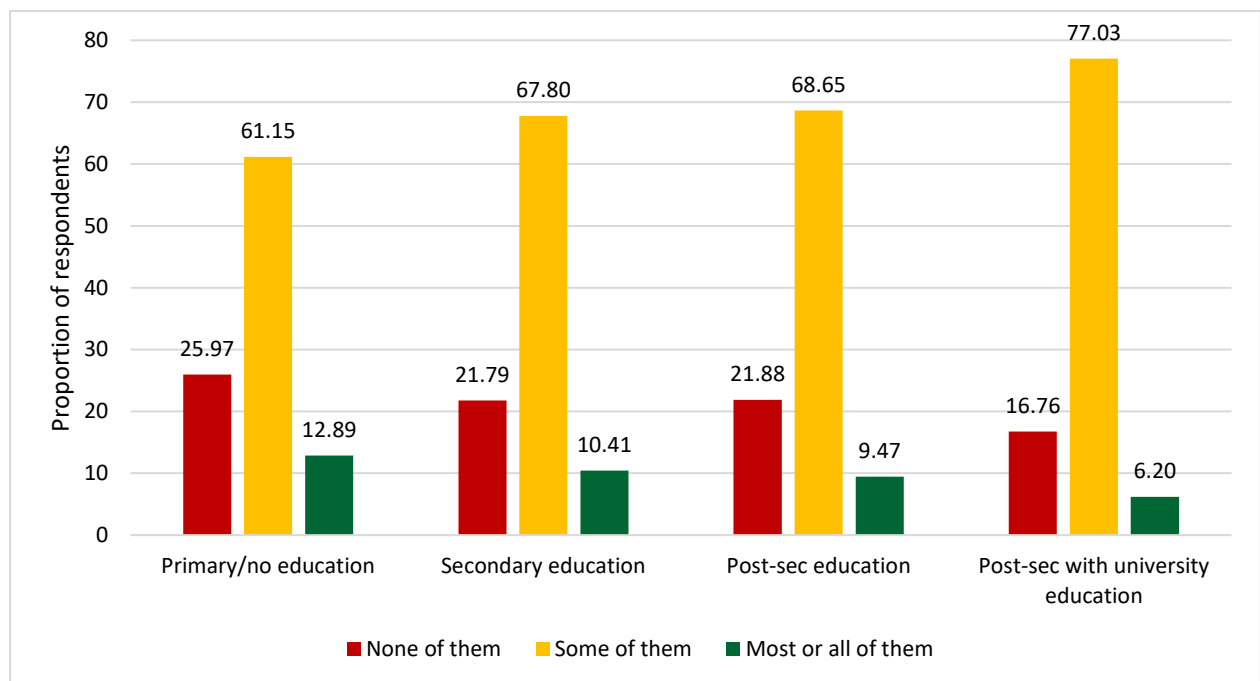


Figure 20. Proportion of respondents who get together with their nearby neighbours for a chat or social visit, by education level.

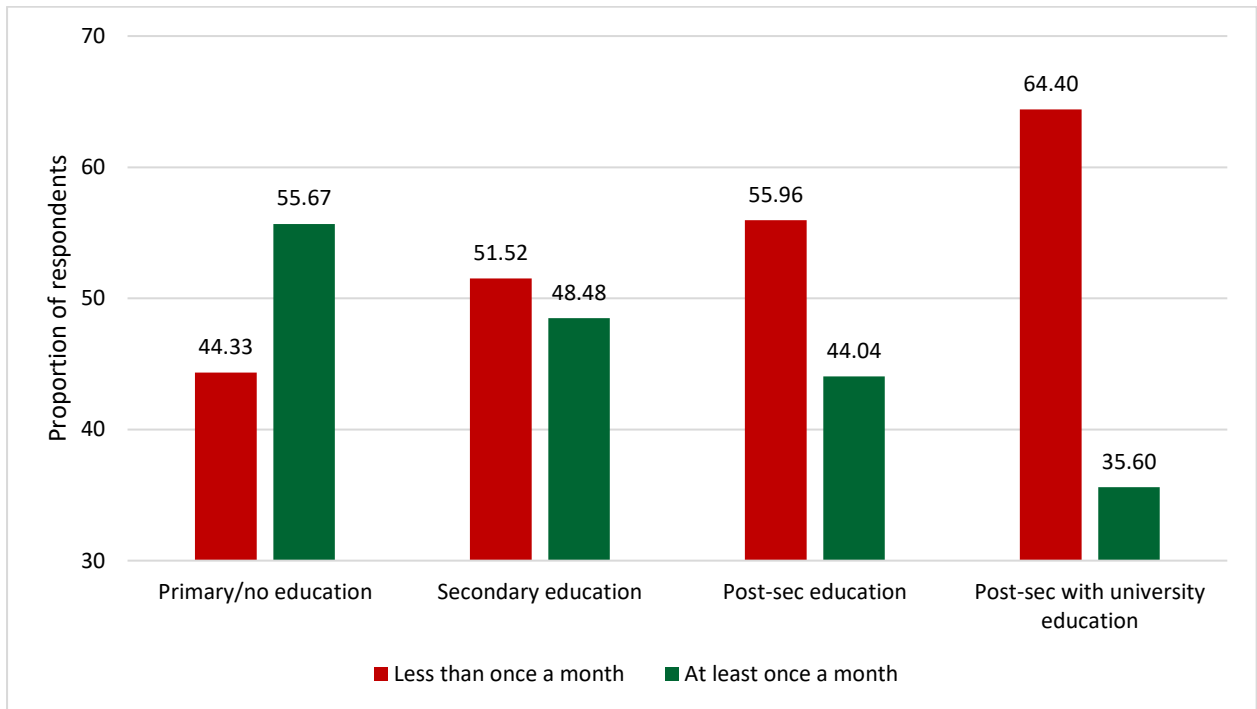
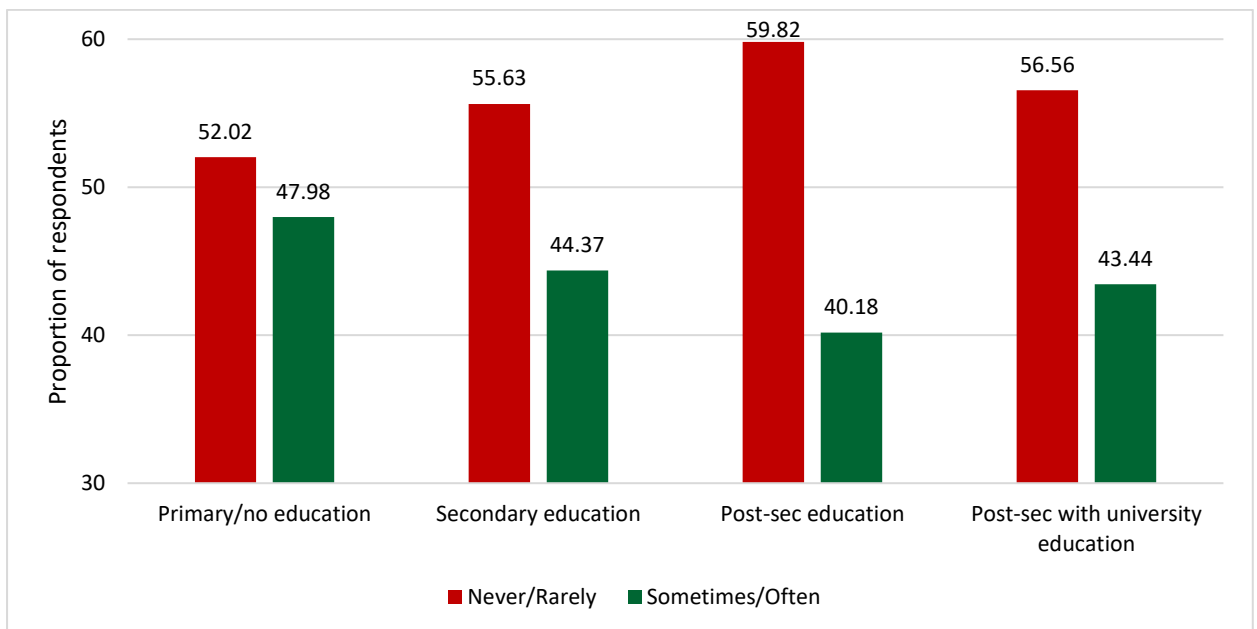


Figure 21. Proportion of respondents who give or receive favours from their neighbours, by education level.

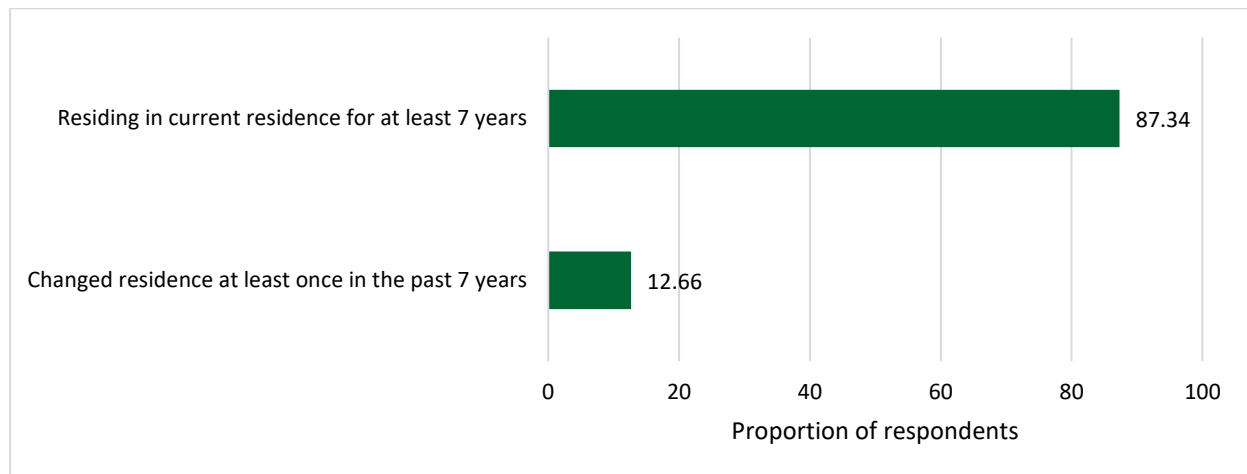


Duration of stay in current residence

Next, we look at respondents' duration of stay in their current residence to determine if those who have lived in their current residence for longer term are more likely to be more familiar with their neighbours and interact more with them.

As mentioned earlier, we categorize respondents into those who have lived in their current for at least the past 7 years, and those who have moved houses at least once in the past 7 years. Only a small proportion of respondents (12.66%) have indicated a change in their residential address at least once in the past 7 years (see Figure 22).

Figure 22. Proportion of respondents who have changed their address over the past 7 years.



Respondents who have lived in their current neighbourhood for at least 7 years were more likely to know most or all of their nearby neighbours (10.70%) than respondents who have moved houses at least once in the past 7 years (6.14%). Additionally, the latter group of respondents are also more likely to indicate that they do not know any of their nearby neighbours by name (31.05%) as compared to the former group (20.71%) (see Figure 23).

Respondents who have lived in their current neighbourhood for at least 7 years are also slightly more likely to get together with their nearby neighbours for a chat or social visit at least once a month and give or receive favours from their neighbours, with close to 50% and 45% of respondents respectively. This is in contrast to those who have changed their residence at least once in the past 7 years, with approximately 40% and 36% respectively instead (see Figures 24 and 25 below).

It is unsurprising that those who have lived in their current neighbourhood for a longer period are more likely to know and interact with their nearby neighbours, as they are more likely to have built up relationships over the years. Nevertheless, this highlights the potential implications for the social lives and the social integration of older adults that ageing-in-place policies can have. Results suggest that older adults who continue to live in the same neighbourhood as they age will be more integrated into their neighbourhood communities, thus supporting the need to enable older adults to age-in-place.

Figure 23. Proportion of respondents who know their nearby neighbours by name, by duration of stay in current residence.

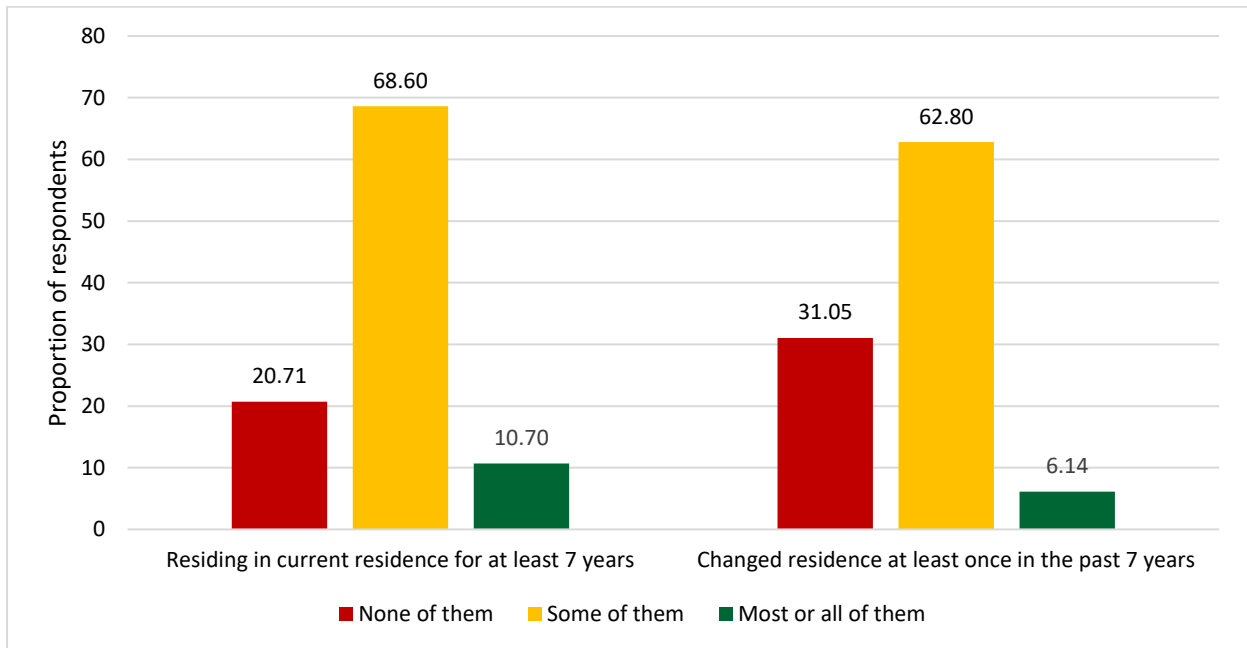


Figure 24. Proportion of respondents who get together with their nearby neighbours for a chat or social visit, by duration of stay in current residence.

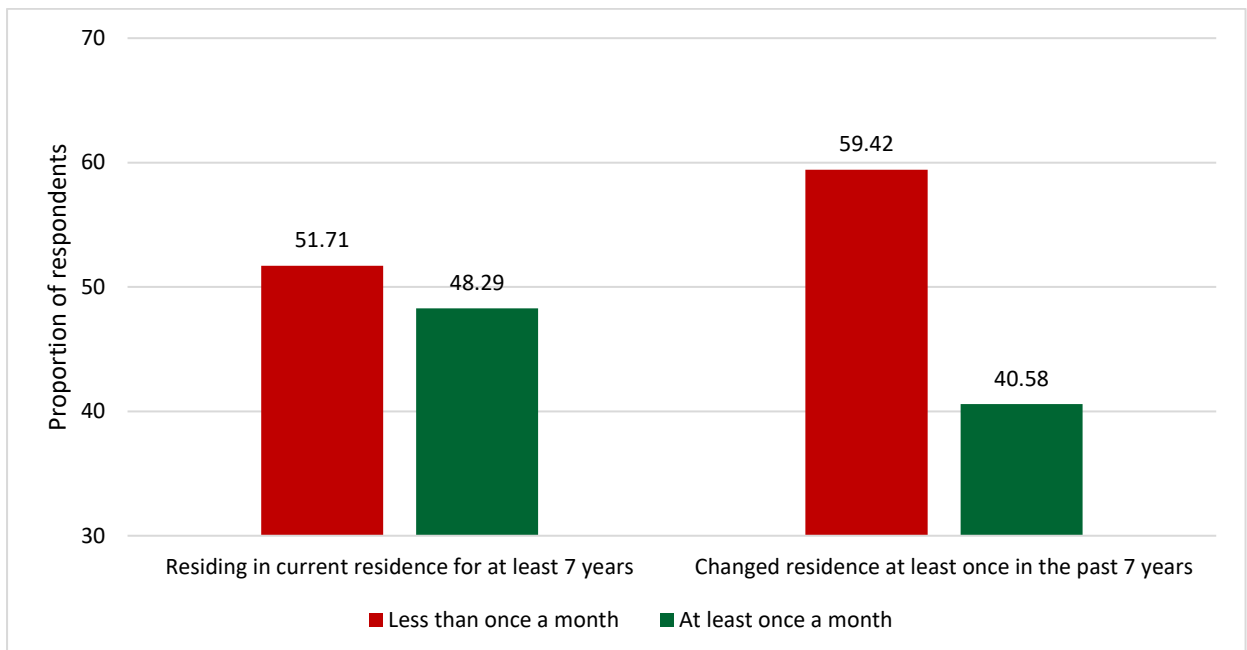
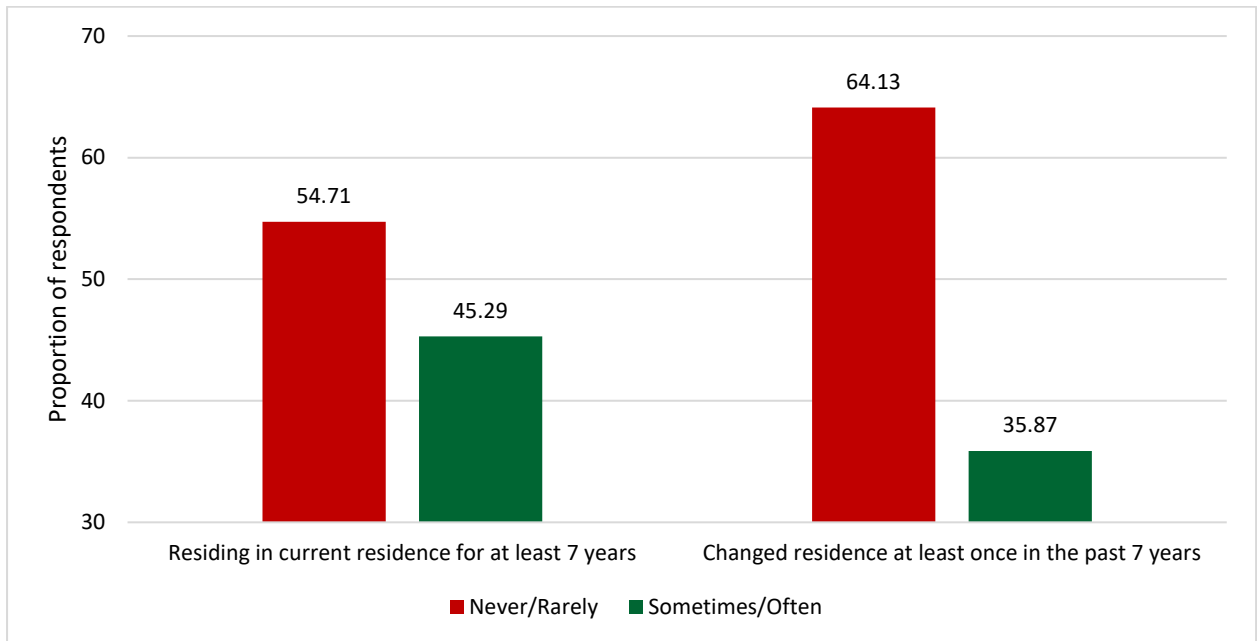


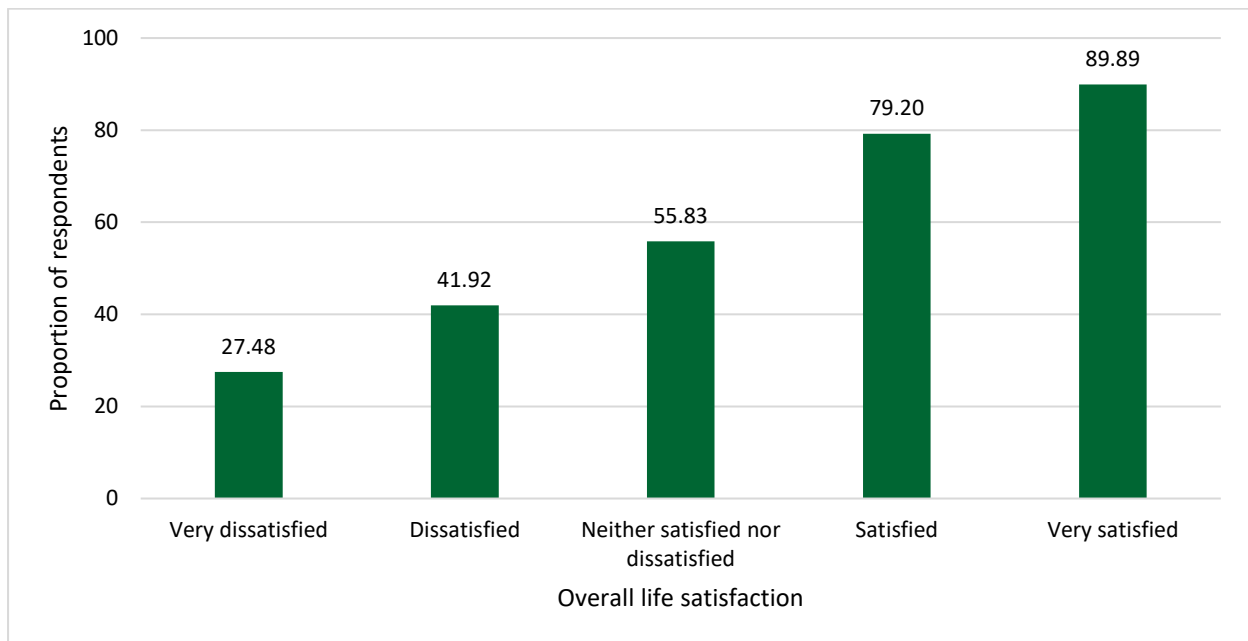
Figure 25. Proportion of respondents who give or receive favours from their neighbours, by duration of stay in current residence.



Overall life satisfaction

Finally, we look at the relationship between neighbourhood satisfaction and overall life satisfaction. From Figure 26, as overall life satisfaction increases from very dissatisfied to very satisfied, the proportion of respondents who are satisfied with their neighbourhoods increases from less than 1 in 3 to almost 9 in 10.

Figure 26. Proportion of respondents who are somewhat or very satisfied with their neighbourhood by overall life satisfaction.



Overall life satisfaction was also found to be positively correlated with the mean neighbourhood satisfaction score for each overall life satisfaction score. The Pearson's correlation coefficient is 0.3668, significant at the 0.01 level.

Respondents who report a higher overall life satisfaction are more likely to report a higher neighbourhood satisfaction score and vice versa, as their overall life satisfaction is likely to include and be somewhat indicative of their satisfaction in other aspects of their life.

DISCUSSION & RECOMMENDATIONS

Overall, we observe that there are various physical and social factors at play influencing neighbourhood satisfaction. Factors such as the availability of amenities within a 10-minute walk, geographical neighbourhood, neighbourhood interactions, as well as age are correlated with neighbourhood satisfaction, which is in turn correlated with overall life satisfaction.

In terms of the physical environment, the number of amenities that are available within a 10-minute walk from home was positively correlated with neighbourhood satisfaction. Additionally, the presence or absence of each amenity had a significant impact on the proportion of respondents who are at least somewhat satisfied with their neighbourhood, with the greatest impact observed in the presence or absence of parks, greenspaces, and exercise spaces, which is in line with existing literature. Nonetheless, while we find that a greater number of amenities is associated with improved neighbourhood satisfaction, it is also important to note that the number of amenities and specific amenities in a neighbourhood is often tied to housing prices and affordability of houses. Particularly, increasing the availability of amenities in an area can possibly lead to increases in housing prices in the area. As such, while providing more amenities in neighbourhoods may increase neighbourhood satisfaction for older adults, the government will need to also ensure that housing remains affordable for low-income older adults who are not homeowners and ensure that sufficient financial aid is available for them so that they can continue affording to live in such areas.

In terms of the different demographic groups, we find that older adults who are of the younger age groups (57 to 66) are more likely to be unfamiliar with their nearby neighbours and have less frequent interactions and exchanges with their nearby neighbours, compared with those in the older age groups (67 to 76). Older adults who are of lower socioeconomic status, measured by housing type and education level, are also more likely to be unfamiliar with their nearby neighbours, yet they are more likely to have more frequent interactions and exchanges with their nearby neighbours. As mentioned earlier, this suggests the possibility of a group of isolated older adults who live in 1-3room HDBs and do not know or interact with their nearby neighbours at all. This is also supported by increasing evidence of social isolation among older people in Singapore (DukeNUS 2021; Ministry of Health 2022).

On the other hand, older adults living in private housing are the least likely to have regular interactions and exchanges with neighbours, likely due to a myriad of factors such as the lack of shared spaces in the neighbourhood as compared to those of HDBs, fewer opportunities to participate in neighbourhood activities organized by town councils that largely cater to HDB dwellers, as well as connections to social circles such as work or recreational clubs.

Based on the above findings, we suggest the following recommendations to increase neighbourhood satisfaction among older adults in Singapore:

1. A differentiated strategy can be employed to increase neighbourhood interactions among the different demographic groups among older adults. Firstly, the government can further strengthen current initiatives to reach out to vulnerable older adults who may be isolated and living alone, potentially through engaging nearby volunteers within the neighbourhoods for regular interactions. Secondly, the government can also expand the scope of current neighbourhood activities to include older adults living in private housing to increase their opportunities to interact with their neighbours as well as other older adults in the neighbourhood.

2. Further research and collaborations on understanding seniors' needs in designing an age-friendly neighbourhood can be conducted, such as the study "Innovative Planning & Design of Age-Friendly Neighbourhoods in Singapore" that was conducted from 2017 to 2019 and led by the Singapore University Technology and Design, alongside researchers from Geriatric Education and Research Institute, architects, as well as policy makers from various government bodies. Some of the initiatives that were designed to address specific challenges faced by older adults, such as the wayfinding prototype at Hong Kah North, where distinct motifs were placed along pillars of the sheltered walkway and void deck spaces to provide older adults with greater ease of finding their way around their neighbourhoods, can be piloted at other neighbourhoods such that its effectiveness can be studied and analysed at different neighbourhoods in Singapore.

In summary, we find that there is potential to further study the physical and social factors that may shape older adults' satisfaction with their neighbourhoods, which in turn shapes and contributes to their overall life satisfaction and well-being. Further research can also include comparisons between objective and subjective measures of the availability of neighbourhood amenities using geolocation data.

ANNEX A

Table 1. Demographic breakdown of proportion (%) of respondents who are somewhat or very satisfied with their neighbourhood in August 2022.

Demographic group	N	<i>Proportion (%) of respondents who are somewhat or very satisfied with their neighbourhood</i>
Gender		
Male	3,234	66.73
Female	3,593	66.80
Housing type*		
HDB 1-3 Room	1,367	60.86
HDB 4-5 Room and Executive Condominium	4,202	66.92
Private Apartment/Property	1,156	73.18
Education		
Primary/None	1,553	62.07
Secondary	2,792	66.91
Post-secondary without Tertiary	1,331	68.75
Post-secondary with Tertiary	1,033	71.15
Age group*		
57-61	1,947	65.33
62-66	2,069	65.68
67-71	1,535	67.82
72-76	1,133	69.99
Duration of stay in current residence*		
Residing in current residence for at least 7 years	5,973	66.23
Changed residence at least once in the past 7 years	866	70.49

**Difference in mean neighbourhood satisfaction between groups was significant at the 0.05 level.*

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About the Centre for Research on Successful Ageing (ROSA)

ROSA is a multidisciplinary research centre based in SMU. It was established with an MOE Tier 3 social sciences research grant, as well as the generous support of The Ngee Ann Kongsi. Research at ROSA seeks to define and measure a holistic construct of well-being and to identify the factors that impact Singaporeans' well-being as they progress through the later phases of life. Through close collaboration with government and other partner agencies, ROSA also aims to translate research insights into policy innovations that advance the well-being of older adults holistically and promote successful ageing in Singapore. ROSA brings together a diverse team of leading international and local researchers in ageing and age-related issues from various disciplines. Through empirical evidence derived from a longitudinal methodological approach, the multidisciplinary and multi-institutional research team advances propositions that promote successful ageing in Singapore.

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